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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,353	03/01/2002	John P. Huss JR.	(TYCO DOCKET)	3066

7590 05/11/2005

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EXAMINER

TRINH, MINH N

ART UNIT PAPER NUMBER

3729

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,353

Applicant(s)

HUSS ET AL.

Examiner

Minh Trinh

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 2-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicants' amendment filed on 2/11/05 has been considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter such as "force to press fit the pin array to the circuit board" (claim 2, line 5), "an encapsulating dispensed into the enclosure" (claim 3), must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification is objected to because it is lacking of the added material such as the tool for connecting pin array to a circuit board. Also, it appears that the apparatus 75 as claimed is not fully described by the original specification. At the most, the specification discloses the pin array connector (see pages 6-7) but not the apparatus for connecting it to the circuit board as intended by applicants. Correction to the specification and/or claims is required.

5. Claims 2-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claims directed to an apparatus for installing pin connector and the body of the claims appear to be directed to a product such as "a connector and its structural elements" which make the scope of the claims unclear. Therefore, Applicant should make the language of the claim consistent with applicant's intent. In formulating

a rejection on the merits, the examiner is considering that the claims are drawn to an apparatus for installing connector and the claims will be rejected accordingly.

It is noted that applicants' amendment seems to be directed to an associated structural elements such as connector where its support surface defining an engagement area for an application of downward installation force to press fit said pin array to the circuit board. Again, the connector and the circuit board are outside structural elements that do not further limit the claimed apparatus. It is suggested if the apparatus is intended applicants should further details each one of its structure limitations. For examples: the apparatus for connecting a pin array connector into a circuit board comprising: a frame, an epoxy dispenser on an upper of the frame, a press plate for engaging and pressing the connector pins to the circuit board, wherein the plate having bottom surface is configured to the shape of a connector support surface, etc.,

Furthermore, it is unclear as to whether the follows elements: i.e., "pin array"; "enclosure", "support surface", etc. are part of the apparatus as recited in the preamble of claim 2. It appears these elements are not a part of the apparatus or tool 75 because the specification (see pages 6-7) describes these are connector structural elements that associate with the mounting tool such as an apparatus 75 for connecting pin array to its circuit board. Therefore, the amendment to the claim languages does not further limit to the apparatus as represented in claims 2 and 9.

Claims 9-11 are also unclear in scope because the body of claims 9-11 directed to an outside structural elements but not the apparatus as claimed in the preamble of claims 9-10.

Applicants should carefully revise the claims to positively recite the structural limitations. The claimed connector does not appear to effect the apparatus. It appears that applicants' invention may be more appropriately claimed as a connector instead of an apparatus of claims 2-11, and applicants may wish to pursue such avenue.

6. Claims 2 and 9 as understood are rejected under 35 U.S.C. 102(b) as being anticipated by Resch (4,503,610). This rejection is set forth in prior Office Action, paragraph 9.

7. Claims 3-7 and 10 as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Resch. This rejection is set forth in prior Office Action, paragraph 11.

8. Claims 8 and 11 as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Resch. This rejection is set forth in prior Office Action, paragraph 12.

Response to Arguments

9. Applicant's arguments filed 2/11/05 have been fully considered but they are not persuasive.

The amendment to the claims has not overcome the 112 rejections (see noted above).

Applicant arguments with respect to the Resch reference (see Remarks" pages 6-8) have been carefully reviewed and are not persuasive. It is noted that applicants' arguments directed to the outside structural element such as the structure limitations of the connector rather than the apparatus for installing of connector. Therefore, the arguments are not persuasive. Also, Applicants contend that the applied art does not disclose the apparatus as claimed by the application's claim 2. The Examiner disagrees because Resch does disclose the connecting tool for connecting pin array connector to a PCB as shown by Figures 1-2. Further, regarding to an associated connector, Resch also discloses the connector having at lest a surface that engaging with the pressing tool as so to press fit the connector (pin array) into its associated PCB or connecting plate 60 (see Fig. 2). Therefore, the Resch reference is still met every aspect limitations of claims 2 and 9 including that as described above.

For all reasons above, Applicants' arguments are not persuasive and are not clearly point out the patentable novelty which they thinks the claims present in view of the state of the art disclosed by the references cited or the rejections made. Therefore, the prior art rejection is maintained for same reasons of the record.

Interviews After Final

10. Applicants note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview in presented briefly, in writing (the

agenda of the interview must be in writing). Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied. See MPEP 714.13 and 713.09.

Conclusion

11. It is noted that any amendment made to the disclosure and the claims. Applicant requires to point out the support provide numeral references to the claimed limitations as well as support in the disclosure (i.e.,/page and line numbers and reference number associated with from the drawings) for better clarity (See 37CFR 1.111 and section 2163.06 of the MPEP).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

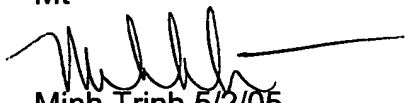
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Minh Trinh 5/2/05
Primary Examiner